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|-------------------------------|--------------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b>         | <b>Applicant(s)</b> |  |
|                               | 10/790,028                     | ZYUZIN, ALEXANDER   |  |
|                               | Examiner<br>James J. Leybourne | Art Unit<br>2881    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to \_\_\_\_\_.
2.  The allowed claim(s) is/are 1-25.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 9/21 & 12/02/204
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 1-25 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 1, the prior art fails to disclose or make obvious a for generating a secondary isotope from a precursor isotope comprising introducing a charge of a precursor compound into a generator system, the generator system having and maintaining the precursor compound as a gas to allow the precursor compound to decay and produce a compound containing secondary isotopes; collecting the secondary compound as a liquid or a solid in a cold trap within the generator system, eluating the compound to remove a major portion of the secondary compound and removing the eluate from the generator system.

Claims 2-10 are allowed by virtue of their dependency on claim 1.

With respect to the independent claim 11, the prior art fails to disclose or make obvious a method as disclosed in claim 1 where  $^{68}\text{Ga}$  is generated from a precursor compound of  $^{68}\text{Ge}$ .

Claims 12-20 are allowed by virtue of their dependency on claim 11.

With respect to the independent claim 21, the prior art fails to disclose or make obvious an apparatus for generating a secondary compound including a

daughter isotope resulting from the decay of a parent isotope included in a charge of a precursor compound comprising:

- a generator system for receiving the charge of the precursor compound including a collector vessel, the collector vessel including a collection surface for the collection of the secondary compound onto a cold trap,
- a precursor compound source operatively connected to the generator system;
- a purge gas source operatively connected to the generator system
- an oxygen scavenger compound source operatively connected to the generator system
- an eluant source operatively connected to the generator system; and
- an eluate outlet operatively connected to the generator system.

Claims 22-25 are allowed by virtue of their dependency on 21.

The main feature that separates the apparatus and method apart from prior art is maintaining the parent precursor and the daughter isotope in a gaseous stage and then condensing the daughter isotope as a compound on a cold trap.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Leybourne whose telephone number is (571) 272-2478. The examiner can normally be reached on M-F 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JJL



NIKITA WELLS  
PRIMARY EXAMINER

